C5205-4-4

# DRI/McGraw-Hill

## 22nd ANNUAL DRI/McGRAW-HILL SURVEY OF POLLUTION CONTROL EXPENDITURES, 1988-90

August 1989

U.S. business appears ready to dramatically boost their erratic commitment to pollution control. Following cutbacks in two of the last three years, investment in new plant and equipment for pollution abatement is slated to rise 18.4% in 1989 (Chart 1 and Table 1). Moreover, the increased spending does not seem to be riding the coattails of higher total capital outlays: total investment in new plant and equipment is projected for a relatively weaker 10.9% rise this year. In contrast, last year's 10.3% capital spending surge was coupled with a 1.1% cut in pollution abatement investment. If the 1989 survey projections hold true, pollution control spending as a percent of total capital spending will rise slightly, to 2.0% (Table 2).

These are the key findings of the 22nd Annual DRI/McGraw-Hill Survey of Pollution Control Expenditures. Conducted from April through June, the survey drew responses from 341 companies replying to a broader questionnaire of capital spending plans. All dollar figures in this report have been

**Chart 1**
**Pollution Control Spending by All Businesses**
(Billions of dollars)

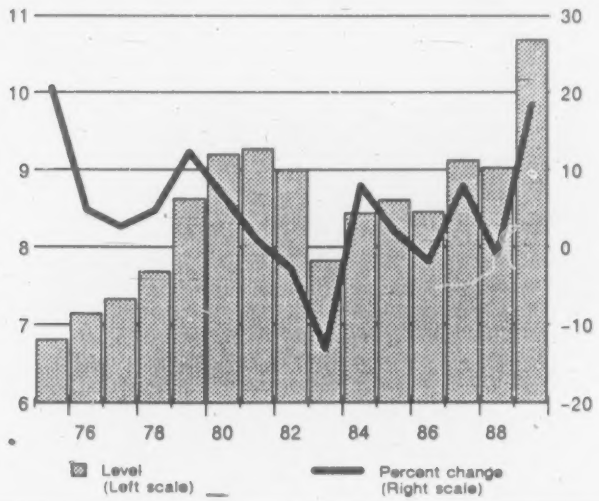


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**Table 1**
**Investment for Pollution Control**
(Millions of dollars)

| | Level | | | Percentage Change | |
|---|---|---|---|---|---|
| | 1988 (a) | 1989 | 1990 | 1989 | 1990 |
| Blast Furnaces, Steel Works | 520 | 725 | 542 | 39.4 | -25.3 |
| Nonferrous Metals | 210 | 213 | 212 | 1.2 | 0.0 |
| Electrical Machinery | 200 | 202 | 203 | 1.1 | 0.4 |
| Nonelectrical Machinery | 180 | 169 | 170 | -6.1 | 0.9 |
| Motor Vehicles | 370 | 679 | 802 | 83.6 | 18.1 |
| Aircraft | 110 | 133 | 131 | 20.6 | -1.3 |
| Fabricated Metals | 130 | 169 | 196 | 30.0 | 15.8 |
| Stone, Clay & Glass | 200 | 265 | 274 | 32.7 | 3.2 |
| Other Durables (b) | 440 | 440 | 435 | 0.0 | -1.2 |
| TOTAL DURABLES | 2,360 | 2,995 | 2,965 | 26.9 | -1.0 |
| Chemicals | 1,260 | 1,361 | 1,375 | 8.0 | 1.0 |
| Paper | 720 | 1,172 | 1,144 | 62.8 | -2.4 |
| Rubber & Plastic | 60 | 73 | 78 | 21.9 | 6.8 |
| Petroleum | 1,650 | 1,619 | 1,662 | -1.9 | 2.7 |
| Food Including Beverages | 320 | 287 | 287 | -10.4 | 0.1 |
| Textiles | 30 | 40 | 40 | 34.0 | -1.7 |
| Other Nondurables | 100 | 200 | 200 | 100.0 | 0.0 |
| TOTAL NONDURABLES | 4,140 | 4,752 | 4,785 | 14.8 | 0.7 |
| ALL MANUFACTURING | 6,510 | 7,747 | 7,750 | 19.0 | 0.0 |
| Mining | 180 | 178 | 178 | -0.9 | -0.5 |
| Railroads | 20 | 20 | 20 | 1.6 | 0.0 |
| Air Transportation | 30 | 28 | 29 | -8.0 | 5.8 |
| Other Transportation | 50 | 44 | 88 | -12.6 | 100.3 |
| Electric Utilities | 1,710 | 2,154 | 2,329 | 26.0 | 8.1 |
| Gas & Other Utilities | 40 | 40 | 40 | -0.2 | -0.6 |
| Communications (c) | 100 | 101 | 102 | 0.8 | 1.2 |
| Trade & Services (d) | 380 | 363 | 362 | -4.4 | -0.3 |
| ALL NONMANUFACTURING | 2,510 | 2,928 | 3,147 | 16.7 | 7.5 |
| ALL BUSINESS | 9,020 | 10,676 | 10,897 | 18.4 | 2.1 |

a. U.S. Department of Commerce, Bureau of Economic Analysis estimates.
b. Includes instruments.
c. Consists of communication; construction; social services and membership organizations; forestry, fisheries, and agricultural services.
d. Consists of wholesale and retail trade; finance and insurance; personal business services (excl. construction); and real estate.

adjusted to represent spending by all U.S. and foreign-owned companies, and reflect domestic investment only. DRI benchmarks its pollution abatement data to those released by the Bureau of Economic Analysis (BEA). Consequently, all historical spending data in this report are derived from the BEA.

After years of neglect and increased evidence of long-term damage from the by-products of American industrial output, public opinion forced a plethora of regulatory remedies on industry in the 1970s. The establishment of federal clean air and water standards resulted in sustained increases in pollution abatement spending, which averaged annual growth of 9.0% between 1973 and 1980 (the earliest period for

**Table 2**
**Pollution Control as a**
**Percent of Capital Spending**

| | 1988 | 1989 | 1990 |
|---|---|---|---|
| Blast Furnaces, Steel Works | 8.4 | 11.7 | 9.6 |
| Nonferrous Metals | 7.6 | 6.7 | 6.7 |
| Electrical Machinery | 1.1 | 1.0 | 1.0 |
| Nonelectrical Machinery | 1.2 | 1.1 | 1.1 |
| Motor Vehicles | 3.5 | 4.4 | 4.8 |
| Aircraft | 3.2 | 3.2 | 3.3 |
| Fabricated Metals | 3.0 | 3.5 | 3.6 |
| Stone, Clay & Glass | 5.6 | 6.2 | 6.5 |
| Other Durables | 3.2 | 2.6 | 2.6 |
| TOTAL DURABLES | 3.0 | 3.3 | 3.2 |
| Chemicals | 6.5 | 5.8 | 5.8 |
| Paper | 6.4 | 7.4 | 7.1 |
| Rubber & Plastic | 1.6 | 1.7 | 2.1 |
| Petroleum | 8.3 | 8.5 | 8.2 |
| Food Including Beverages | 2.5 | 1.9 | 1.9 |
| Textiles | 1.4 | 1.8 | 2.5 |
| Other Nondurables | 0.5 | 1.0 | 1.0 |
| TOTAL NONDURABLES | 4.7 | 4.7 | 4.8 |
| ALL MANUFACTURING | 3.9 | 4.0 | 4.0 |
| Mining | 1.4 | 1.4 | 1.4 |
| Railroads | 0.3 | 0.2 | 0.3 |
| Air Transportation | 0.4 | 0.3 | 0.3 |
| Other Transportation | 0.7 | 0.6 | 0.6 |
| Electric Utilities | 5.4 | 6.4 | 6.9 |
| Gas & Other Utilities | 0.3 | 0.2 | 0.3 |
| Communications | 0.2 | 0.2 | 0.2 |
| Trade & Services | 0.2 | 0.2 | 0.2 |
| ALL NONMANUFACTURING | 0.8 | 0.9 | 0.9 |
| ALL BUSINESS | 1.9 | 2.0 | 2.0 |

which data are available from the BEA). In contrast, the average annual growth rate for 1980–88 shows a slight decline of 0.2%.

Even adjusting for inflation, which was high in the 1970s and low in the 1980s, does little to improve the recent trend: after averaging real gains of 0.2% per year between 1973 to 1980, real pollution control investment dropped an average 2.4% annually from 1980 through 1988 (Chart 2).

While this year's comeback is good news, the current level of spending pales beside previous commitments. Throughout the 1980s, pollution control investment as a share of total capital spending undershot the levels achieved in the 1970s, falling in each year except 1987. The share averaged nearly 3.6% in 1973–79, peaking at 4.2% in 1975 (Chart 3). In 1989, the estimated share should rise from 1.9% to 2.0%.

**Chart 2**
**Real Versus Nominal Pollution Control Investment**
(Billions of dollars)

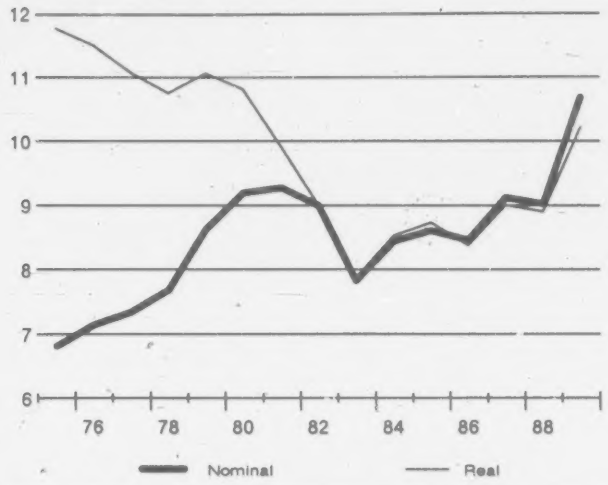
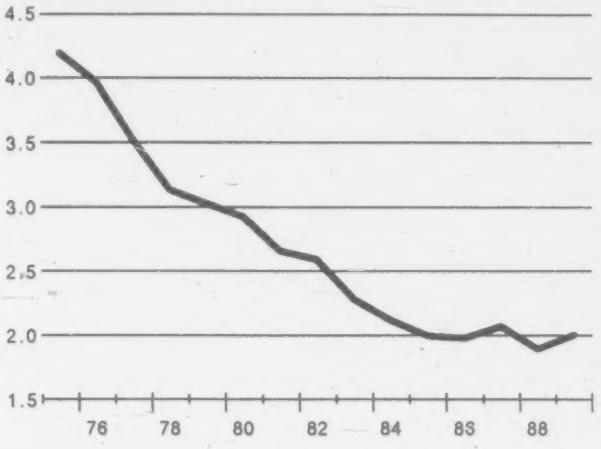



**Chart 3**
**Pollution Control as a Percent of Capital Spending**




Nonetheless, spending may be due for a prolonged upswing. In recent years, pollution control investment probably resulted from replacement and modernization needs under existing antipollution regulations. The recent spate of reauthorizations (including the 1986 Safe Drinking Water Act, the 1986 Superfund Act, and the 1987 Clean Water Act) have tightened compliance requirements.

Moreover, the mounting evidence on acid rain damage and increasing public outrage over unusable beaches and oil spills will only intensify the pressure on government for further environmental safeguards that require increased funding from both the public and private sectors. Witness the Bush Administration's proposed strengthening of the Clean Air Act, estimated to cost affected industries an additional $14–18 billion annually in overall antipollution investment.

## TARGETED POLLUTION CONTROL

While overall investment in new plant and equipment for pollution abatement lanquished during the last decade, spending on solid waste disposal moved to the forefront of public concern and, ultimately, industrial antipollution efforts. Following 17% growth in capital spending for this targeted category during 1987 when overall pollution control spending by business rose a relatively weak 7.9%, solid waste control investment grew an estimated 25% last year as overall spending actually declined. Our latest survey

indicates a 27.5% surge in 1989 budgets for solid waste control investment, much faster than the overall growth rate (Table 3 and Chart 4).

With air pollution the focus of much attention in the 1970s, abatement spending steadily grew to a high of $5.1 billion by 1981. Annual declines have been the norm since then, however, culminating in a 4.8% drop to $3.98 billion in 1988. Investment in plant and equipment targeted at air pollution control should rebound 17.0%, to $4.66 billion, in 1989. Although a slight spending cut was reported by survey respondents for 1990, President Bush's apparent commitment to clean air will likely shake some additional corporate funds loose sometime in the early 1990s.

**Table 3**
**Pollution Control Expenditures: Air, Water, and Solid Waste**
(Millions of dollars)

| | Level | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1988 | | | 1989 | | | 1990 | | |
| | Air | Water | Solid Waste | Air | Water | Solid Waste | Air | Water | Solid Waste |
| Blast Furnaces, Steel Works | 290 | 190 | 50 | 484 | 188 | 53 | 376 | 139 | 27 |
| Nonferrous Metals | 110 | 70 | 30 | 111 | 70 | 32 | 110 | 70 | 32 |
| Electrical Machinery | 60 | 110 | 30 | 61 | 110 | 31 | 62 | 110 | 31 |
| Nonelectrical Machinery | 30 | 110 | 30 | 30 | 109 | 30 | 31 | 110 | 30 |
| Motor Vehicles | 120 | 150 | 100 | 147 | 353 | 180 | 90 | 510 | 203 |
| Aircraft | 20 | 50 | 40 | 23 | 61 | 48 | 23 | 60 | 48 |
| Fabricated Metals | 30 | 100 | 10 | 32 | 125 | 12 | 36 | 146 | 14 |
| Stone, Clay & Glass | 60 | 40 | 90 | 87 | 70 | 109 | 99 | 67 | 109 |
| Other Durables | 200 | 150 | 90 | 146 | 219 | 75 | 142 | 215 | 78 |
| TOTAL DURABLES | 920 | 970 | 470 | 1,121 | 1,304 | 570 | 967 | 1,425 | 572 |
| Chemicals | 450 | 520 | 300 | 509 | 541 | 311 | 513 | 547 | 314 |
| Paper | 430 | 100 | 180 | 788 | 125 | 260 | 785 | 130 | 229 |
| Rubber & Plastic | 30 | 30 | 10 | 23 | 44 | 6 | 28 | 43 | 7 |
| Petroleum | 600 | 840 | 210 | 602 | 824 | 193 | 618 | 846 | 198 |
| Food Including Beverages | 100 | 180 | 30 | 100 | 160 | 27 | 100 | 160 | 27 |
| Textiles | 20 | 10 | 10 | 20 | 10 | 10 | 20 | 10 | 10 |
| Other Nondurables | 40 | 50 | 10 | 40 | 150 | 10 | 40 | 150 | 10 |
| TOTAL NONDURABLES | 1,670 | 1,720 | 750 | 2,081 | 1,854 | 817 | 2,104 | 1,886 | 795 |
| ALL MANUFACTURING | 2,590 | 2,690 | 1,230 | 3,202 | 3,158 | 1,386 | 3,072 | 3,311 | 1,367 |
| Mining | 70 | 80 | 30 | 67 | 81 | 31 | 67 | 80 | 30 |
| Railroads | 0 | 20 | 0 | 0 | 20 | 0 | 0 | 20 | 0 |
| Air Transportation | 0 | 0 | 20 | 0 | 0 | 28 | 0 | 0 | 29 |
| Other Transportation | 10 | 40 | 0 | 10 | 34 | 0 | 11 | 77 | 0 |
| Electric Utilities | 1,120 | 380 | 210 | 1,186 | 431 | 537 | 1,195 | 577 | 557 |
| Gas & Other Utilities | 10 | 30 | 0 | 10 | 30 | 0 | 10 | 30 | 0 |
| Communications | 30 | 30 | 40 | 30 | 30 | 40 | 31 | 31 | 40 |
| Trade & Services | 150 | 70 | 150 | 149 | 68 | 146 | 149 | 68 | 145 |
| ALL NONMANUFACTURING | 1,400 | 640 | 470 | 1,453 | 694 | 781 | 1,463 | 883 | 801 |
| ALL BUSINESS | 3,980 | 3,340 | 1,700 | 4,655 | 3,853 | 2,168 | 4,535 | 4,194 | 2,168 |

Note: U.S. Department of Commerce, Bureau of Economic Analysis estimates for 1988.

**Chart 4**
**Air, Water, and Solid Waste Control Expenditures**
(Billions of dollars)

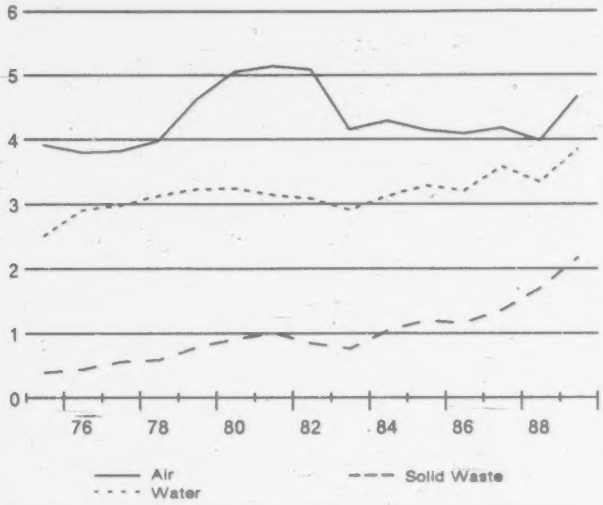
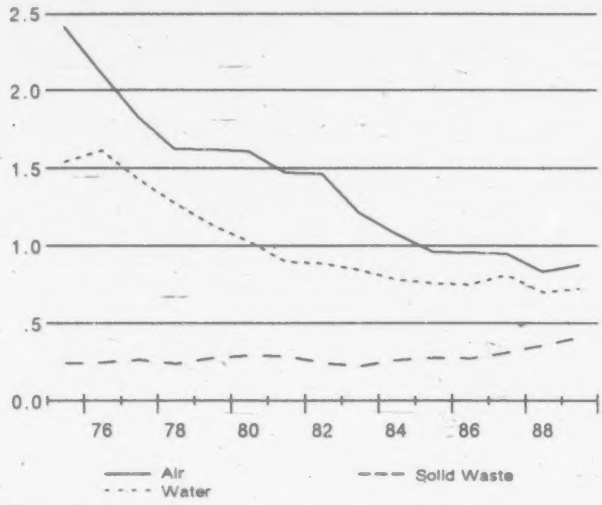



**Chart 5**
**Components of Pollution Control Spending as a Percent of Capital Spending**




In general, business spending on water pollution control has been less volatile than that on the other two target categories. After hovering in the $3.0–3.2 billion range for most of the past decade, investment in water pollution abatement rose nearly 12%, to $3.58 billion, in 1987. Although last year's spending level is estimated to be down 6.7%, the current surge in overall antipollution budgets will push spending on water pollution controls up 15.3% in 1989.

## SPENDING BY SECTOR

Manufacturers plan a 19% rise, to $7.75 billion, in pollution control spending on plant and equipment this year. Nondurable goods makers, who account for nearly one-half of all corporate pollution control investment, report a 14.8% increase, to $4.75 billion. In fact, two of the three biggest spenders on pollution control are nondurables manufacturers: the petroleum and chemical industries.

Following cutbacks or essentially flat growth in antipollution budgets from 1981 through 1986, petroleum refiners boosted outlays 65%, to $2.11 billion, in 1987. This surge was short-lived, though, as last year's spending was slashed nearly 22%, to $1.65 billion. Another 1.9% cut is projected in the current year despite the aggregate upward trend reported for all industries. Antipollution investment by the chemical

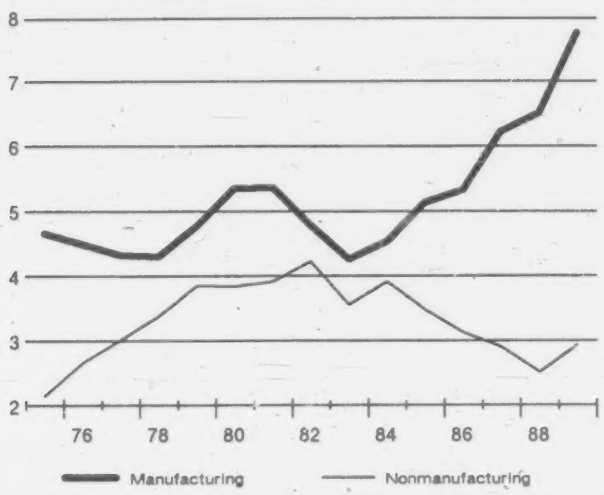
**Table 4**
**Pollution Control Expenditures: Air, Water, and Solid Waste**
(Percent of capital spending)

| | 1988 | | | 1989 | | | 1990 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Air | Water | Solid Waste | Air | Water | Solid Waste | Air | Water | Solid Waste |
| Blast Furnaces, Steel Works | 4.7 | 3.1 | 0.8 | 7.8 | 3.0 | 0.9 | 6.7 | 2.5 | 0.5 |
| Nonferrous Metals..... | 4.0 | 2.5 | 1.1 | 3.5 | 2.2 | 1.0 | 3.5 | 2.2 | 1.0 |
| Electrical Machinery..... | 0.3 | 0.6 | 0.2 | 0.3 | 0.5 | 0.2 | 0.3 | 0.6 | 0.2 |
| Nonelectrical Machinery.... | 0.2 | 0.7 | 0.2 | 0.2 | 0.7 | 0.2 | 0.2 | 0.7 | 0.2 |
| Motor Vehicles..... | 1.1 | 1.4 | 0.9 | 0.9 | 2.3 | 1.2 | 0.5 | 3.1 | 1.2 |
| Aircraft..... | 0.6 | 1.5 | 1.2 | 0.6 | 1.5 | 1.2 | 0.6 | 1.5 | 1.2 |
| Fabricated Metals..... | 0.7 | 2.3 | 0.2 | 0.7 | 2.6 | 0.3 | 0.7 | 2.7 | 0.3 |
| Stone, Clay & Glass..... | 1.7 | 1.1 | 2.5 | 2.0 | 1.6 | 2.5 | 2.3 | 1.6 | 2.6 |
| Other Durables ..... | 1.5 | 1.1 | 0.7 | 0.9 | 1.3 | 0.4 | 0.8 | 1.3 | 0.5 |
| TOTAL DURABLES..... | 1.2 | 1.2 | 0.6 | 1.2 | 1.4 | 0.6 | 1.1 | 1.6 | 0.6 |
| Chemicals..... | 2.3 | 2.7 | 1.6 | 2.2 | 2.3 | 1.3 | 2.2 | 2.3 | 1.3 |
| Paper..... | 3.8 | 0.9 | 1.6 | 5.0 | 0.8 | 1.6 | 4.9 | 0.8 | 1.4 |
| Rubber & Plastic..... | 0.8 | 0.8 | 0.3 | 0.5 | 1.1 | 0.1 | 0.8 | 1.2 | 0.2 |
| Petroleum..... | 3.0 | 4.2 | 1.1 | 3.2 | 4.3 | 1.0 | 3.0 | 4.2 | 1.0 |
| Food Including Beverages... | 0.8 | 1.4 | 0.2 | 0.6 | 1.0 | 0.2 | 0.7 | 1.1 | 0.2 |
| Textiles..... | 0.9 | 0.5 | 0.5 | 0.9 | 0.4 | 0.4 | 1.3 | 0.6 | 0.6 |
| Other Nondurables..... | 0.2 | 0.3 | 0.1 | 0.2 | 0.7 | 0.0 | 0.2 | 0.8 | 0.1 |
| TOTAL NONDURABLES..... | 1.9 | 2.0 | 0.9 | 2.1 | 1.8 | 0.8 | 2.1 | 1.9 | 0.8 |
| ALL MANUFACTURING..... | 1.6 | 1.6 | 0.7 | 1.7 | 1.6 | 0.7 | 1.6 | 1.7 | 0.7 |
| Mining..... | 0.6 | 0.6 | 0.2 | 0.5 | 0.6 | 0.2 | 0.5 | 0.6 | 0.2 |
| Railroads..... | 0.0 | 0.3 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.3 | 0.0 |
| Air Transportation..... | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.3 |
| Other Transportation..... | 0.1 | 0.6 | 0.0 | 0.1 | 0.4 | 0.0 | 0.1 | 0.5 | 0.0 |
| Electric Utilities..... | 3.5 | 1.2 | 0.7 | 3.5 | 1.3 | 1.6 | 3.5 | 1.7 | 1.6 |
| Gas & Other Utilities..... | 0.1 | 0.2 | 0.0 | 0.1 | 0.2 | 0.0 | 0.1 | 0.2 | 0.0 |
| Communications ..... | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Trade & Services ..... | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 |
| ALL NONMANUFACTURING..... | 0.4 | 0.2 | 0.1 | 0.4 | 0.2 | 0.2 | 0.4 | 0.2 | 0.2 |
| ALL BUSINESS..... | 0.8 | 0.7 | 0.4 | 0.9 | 0.7 | 0.4 | 0.8 | 0.8 | 0.4 |

industry fluctuated between $600 million and $900-plus million from 1975 through 1987. An estimated 46.5% surge last year pushed the industry's spending level to $1.26 billion; chemical company respondents predict a more moderate 8% gain in 1989 spending levels.

As for the durable goods sector, the dominant automotive and steel industries each plan sizable investment surges of 83.6% and 39.4%, respectively; growth in pollution control spending was essentially flat for both industries in 1987. Of the two, only the automotive industry reports a concurrent overall capital spending jump (up 47%). Only the non-electrical machinery industry reports a cut in 1989 pollution control budgets.

**Chart 6**
**Polution Control Spending by Sector**
(Billions of dollars)




Nonmanufacturing industries plan an aggregate 16.7% increase, to $2.93 billion, in current antipollution spending budgets. Electric utilities, the largest pollution abatement spender of all industries, reports a 26% jump to $2.15 billion. This increase easily swamps spending declines reported by the mining, airline, "other" transportation, gas utility, and trade and service industries.

## APPENDIX

**Table I.1**
**Historical Pollution Control Expenditures**
(Millions of dollars)

| | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blast Furnaces, Steel Works | 190 | 250 | 440 | 510 | 520 | 460 | 630 | 630 | 530 | 520 | 340 | 400 | 610 | 470 | 530 |
| Nonferrous Metals | 340 | 370 | 410 | 300 | 230 | 170 | 160 | 200 | 170 | 170 | 130 | 210 | 190 | 190 | 230 |
| Electrical Machinery | 120 | 120 | 90 | 90 | 100 | 190 | 210 | 220 | 290 | 290 | 250 | 180 | 180 | 250 | 320 |
| Nonelectrical Machinery | 90 | 80 | 90 | 80 | 120 | 100 | 110 | 120 | 110 | 130 | 130 | 190 | 150 | 100 | 150 |
| Motor Vehicles | 260 | 140 | 100 | 100 | 170 | 220 | 310 | 410 | 380 | 280 | 240 | 300 | 490 | 540 | 360 |
| Aircraft | 30 | 30 | 30 | 40 | 30 | 30 | 50 | 50 | 50 | 40 | 30 | 40 | 30 | 50 | 90 |
| Fabricated Metals | 90 | 100 | 130 | 80 | 90 | 50 | 60 | 70 | 50 | 40 | 40 | 60 | 80 | 90 | 150 |
| Stone, Clay & Glass | 150 | 210 | 220 | 150 | 160 | 250 | 250 | 310 | 190 | 110 | 130 | 130 | 130 | 100 | 180 |
| Other Durables | 270 | 240 | 250 | 270 | 230 | 270 | 240 | 230 | 240 | 210 | 160 | 200 | 250 | 260 | 270 |
| TOTAL DURABLES | 1,540 | 1,540 | 1,760 | 1,620 | 1,650 | 1,740 | 2,020 | 2,240 | 2,010 | 1,790 | 1,450 | 1,710 | 2,110 | 2,050 | 2,280 |
| Chemicals | 420 | 540 | 760 | 880 | 820 | 620 | 620 | 690 | 790 | 680 | 610 | 580 | 740 | 980 | 860 |
| Paper | 310 | 380 | 470 | 430 | 370 | 330 | 430 | 460 | 450 | 350 | 370 | 540 | 580 | 550 | 450 |
| Rubber & Plastic | 40 | 50 | 50 | 40 | 60 | 60 | 50 | 30 | 50 | 40 | 40 | 70 | 80 | 80 | 90 |
| Petroleum | 540 | 750 | 1,210 | 1,100 | 1,040 | 1,130 | 1,260 | 1,540 | 1,680 | 1,570 | 1,460 | 1,280 | 1,250 | 1,280 | 2,110 |
| Food Including Beverages | 250 | 250 | 300 | 330 | 300 | 310 | 260 | 260 | 270 | 260 | 240 | 260 | 250 | 270 | 280 |
| Textiles | 40 | 40 | 50 | 40 | 40 | 50 | 70 | 80 | 50 | 40 | 40 | 40 | 30 | 30 | 40 |
| Other Nondurables | 40 | 60 | 60 | 40 | 40 | 60 | 60 | 60 | 60 | 60 | 60 | 70 | 80 | 90 | 110 |
| TOTAL NONDURABLES | 1,630 | 2,080 | 2,900 | 2,870 | 2,670 | 2,570 | 2,750 | 3,110 | 3,350 | 2,990 | 2,810 | 2,830 | 3,020 | 3,280 | 3,930 |
| ALL MANUFACTURING | 3,170 | 3,620 | 4,660 | 4,490 | 4,320 | 4,300 | 4,770 | 5,350 | 5,360 | 4,780 | 4,260 | 4,530 | 5,130 | 5,330 | 6,220 |
| Mining | 140 | 150 | 140 | 270 | 360 | 430 | 450 | 370 | 320 | 380 | 260 | 370 | 320 | 250 | 170 |
| Railroads | 30 | 40 | 50 | 60 | 60 | 60 | 70 | 60 | 60 | 80 | 40 | 50 | 50 | 40 | 40 |
| Air Transportation | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 0 | 0 | 0 | 10 | 20 |
| Other Transportation | 20 | 60 | 60 | 60 | 40 | 40 | 40 | 40 | 40 | 30 | 30 | 20 | 20 | 40 | 70 |
| Electric Utilities | 1,300 | 1,460 | 1,510 | 1,860 | 2,270 | 2,490 | 2,940 | 2,990 | 3,180 | 3,440 | 2,970 | 3,170 | 2,790 | 2,440 | 2,230 |
| Gas & Other Utilities | 30 | 40 | 40 | 50 | 30 | 30 | 60 | 60 | 90 | 110 | 70 | 80 | 70 | 50 | 50 |
| Communications | 80 | 60 | 80 | 40 | 40 | 60 | 30 | 60 | 50 | 20 | 20 | 10 | 20 | 20 | 30 |
| Trade & Services | 250 | 210 | 250 | 300 | 210 | 240 | 250 | 250 | 150 | 160 | 170 | 210 | 210 | 260 | 300 |
| ALL NONMANUFACTURING | 1,860 | 2,030 | 2,140 | 2,660 | 3,010 | 3,380 | 3,850 | 3,840 | 3,910 | 4,220 | 3,560 | 3,910 | 3,480 | 3,120 | 2,900 |
| ALL BUSINESS | 5,030 | 5,650 | 6,810 | 7,140 | 7,330 | 7,680 | 8,620 | 9,190 | 9,270 | 9,000 | 7,820 | 8,440 | 8,610 | 8,450 | 9,120 |

**Table 1.2**
**Historical Pollution Control Expenditures**
(Percent of total capital spending)

| | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blast Furnaces, Steel Works | 15.2 | 12.7 | 14.3 | 16.3 | 18.1 | 17.7 | 19.6 | 18.3 | 15.2 | 13.7 | 10.5 | 11.3 | 14.8 | 14.1 | 11.3 |
| Nonferrous Metals | 27.8 | 21.0 | 23.9 | 21.2 | 17.8 | 11.7 | 9.7 | 9.4 | 6.8 | 9.0 | 7.5 | 9.9 | 10.1 | 9.8 | 10.6 |
| Electrical Machinery | 3.4 | 3.2 | 2.9 | 2.5 | 2.2 | 3.2 | 2.8 | 2.3 | 2.7 | 2.6 | 2.2 | 1.2 | 1.2 | 1.8 | 2.1 |
| Nonelectrical Machinery | 2.3 | 1.6 | 1.9 | 1.5 | 1.9 | 1.3 | 1.1 | 1.1 | 0.8 | 1.0 | 1.0 | 1.2 | 0.9 | 0.7 | 1.1 |
| Motor Vehicles | 6.8 | 3.3 | 3.0 | 2.8 | 2.9 | 3.1 | 3.7 | 4.5 | 3.9 | 3.6 | 3.3 | 2.7 | 3.3 | 3.9 | 3.0 |
| Aircraft | 3.8 | 2.5 | 2.5 | 3.9 | 2.6 | 1.7 | 1.9 | 1.4 | 1.5 | 1.2 | 1.0 | 1.1 | 0.9 | 1.3 | 2.5 |
| Fabricated Metals | 5.0 | 5.2 | 6.6 | 3.6 | 3.7 | 1.7 | 1.9 | 2.1 | 1.4 | 1.3 | 1.4 | 1.7 | 2.2 | 2.2 | 3.7 |
| Stone, Clay & Glass | 9.5 | 12.7 | 13.2 | 7.8 | 6.9 | 7.9 | 6.3 | 7.8 | 5.6 | 3.8 | 4.7 | 4.2 | 3.8 | 3.2 | 5.3 |
| Other Durables | 5.7 | 4.8 | 5.6 | 5.2 | 3.9 | 3.8 | 3.1 | 2.6 | 2.6 | 2.6 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 |
| TOTAL DURABLES | 6.8 | 5.8 | 6.9 | 5.9 | 5.0 | 4.4 | 4.2 | 4.0 | 3.4 | 3.2 | 2.7 | 2.6 | 2.9 | 3.0 | 3.2 |
| Chemicals | 10.1 | 8.7 | 10.7 | 11.9 | 11.2 | 8.0 | 6.3 | 5.9 | 6.0 | 5.4 | 4.7 | 3.8 | 4.5 | 5.8 | 5.2 |
| Paper | 15.6 | 13.2 | 16.1 | 14.4 | 10.6 | 8.7 | 8.2 | 7.1 | 7.4 | 6.3 | 6.2 | 7.5 | 6.8 | 6.3 | 5.0 |
| Rubber & Plastic | 2.6 | 3.1 | 4.2 | 2.9 | 3.4 | 2.6 | 2.0 | 1.5 | 2.3 | 1.8 | 1.6 | 2.3 | 2.1 | 2.1 | 2.6 |
| Petroleum | 11.7 | 10.7 | 13.3 | 11.0 | 8.8 | 8.6 | 8.3 | 7.9 | 6.5 | 5.9 | 6.3 | 5.0 | 4.7 | 7.1 | 12.3 |
| Food Including Beverages | 6.7 | 5.9 | 6.8 | 6.1 | 5.2 | 4.7 | 3.6 | 3.2 | 2.8 | 3.0 | 3.1 | 2.9 | 2.4 | 2.5 | 2.5 |
| Textiles | 3.9 | 3.8 | 5.8 | 4.1 | 3.4 | 3.8 | 4.9 | 5.2 | 3.0 | 2.7 | 2.6 | 2.1 | 1.7 | 1.8 | 2.0 |
| Other Nondurables | 1.5 | 2.2 | 2.2 | 1.4 | 1.2 | 1.4 | 1.0 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.6 | 0.6 | 0.7 |
| TOTAL NONDURABLES | 8.3 | 8.1 | 10.3 | 9.3 | 7.7 | 6.6 | 5.8 | 5.5 | 5.0 | 4.6 | 4.5 | 3.9 | 3.8 | 4.5 | 5.2 |
| ALL MANUFACTURING | 7.5 | 6.9 | 8.7 | 7.7 | 6.4 | 5.5 | 5.0 | 4.8 | 4.2 | 4.0 | 3.7 | 3.3 | 3.3 | 3.7 | 4.3 |
| Mining | 4.2 | 3.3 | 2.3 | 3.5 | 3.7 | 3.8 | 3.5 | 2.3 | 1.5 | 1.9 | 1.7 | 2.2 | 2.0 | 2.2 | 1.5 |
| Railroads | 1.0 | 1.1 | 1.3 | 1.4 | 1.3 | 1.2 | 1.1 | 0.8 | 1.0 | 1.5 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 |
| Air Transportation | 0.5 | 0.6 | 0.7 | 0.9 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 |
| Other Transportation | 0.6 | 1.6 | 1.3 | 1.0 | 0.7 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.3 | 0.3 | 0.7 | 1.1 |
| Electric Utilities | 8.6 | 8.7 | 8.9 | 9.6 | 9.8 | 9.5 | 10.1 | 9.9 | 10.0 | 9.5 | 8.0 | 8.6 | 7.7 | 7.2 | 7.0 |
| Gas & Other Utilities | 1.0 | 1.3 | 1.2 | 1.4 | 0.7 | 0.6 | 0.9 | 0.8 | 1.0 | 1.2 | 0.9 | 0.8 | 0.6 | 0.4 | 0.4 |
| Communications | 0.4 | 0.3 | 0.4 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| Trade & Services | 0.5 | 0.4 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 |
| ALL NONMANUFACTURING | 1.9 | 1.9 | 2.0 | 2.2 | 2.1 | 2.0 | 2.0 | 1.9 | 1.8 | 1.9 | 1.6 | 1.5 | 1.2 | 1.1 | 1.0 |
| ALL BUSINESS | 3.6 | 3.5 | 4.2 | 4.0 | 3.5 | 3.1 | 3.0 | 2.9 | 2.7 | 2.6 | 2.3 | 2.1 | 2.0 | 2.0 | 2.1 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis

**Table I.3**
**Historical Pollution Control Expenditures on Air, Water, and Solid Waste**
(Millions of dollars)

| | 1973 | | | 1974 | | | 1975 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Air | Water | Solid Waste | Air | Water | Solid Waste | Air | Water | Solid Waste |
| Blast Furnaces, Steel Works | 130 | 60 | 0 | 170 | 70 | 10 | 290 | 150 | 0 |
| Nonferrous Metals | 300 | 20 | 10 | 290 | 60 | 20 | 320 | 60 | 30 |
| Electrical Machinery | 50 | 60 | 10 | 60 | 60 | 0 | 50 | 30 | 10 |
| Nonelectrical Machinery | 50 | 40 | 10 | 40 | 40 | 10 | 40 | 40 | 10 |
| Motor Vehicles | 120 | 90 | 40 | 70 | 50 | 30 | 40 | 50 | 20 |
| Aircraft | 20 | 20 | 0 | 20 | 10 | 0 | 20 | 10 | 0 |
| Fabricated Metals | 50 | 30 | 0 | 70 | 20 | 0 | 70 | 60 | 0 |
| Stone, Clay & Glass | 130 | 20 | 0 | 190 | 20 | 0 | 190 | 30 | 0 |
| Other Durables | 200 | 60 | 10 | 140 | 70 | 20 | 150 | 80 | 10 |
| TOTAL DURABLES | 1,050 | 400 | 80 | 1,050 | 400 | 90 | 1,170 | 510 | 80 |
| Chemicals | 180 | 220 | 20 | 230 | 280 | 30 | 290 | 440 | 30 |
| Paper | 170 | 120 | 10 | 240 | 120 | 10 | 260 | 200 | 20 |
| Rubber & Plastic | 20 | 20 | 0 | 30 | 20 | 0 | 30 | 20 | 0 |
| Petroleum | 310 | 180 | 50 | 390 | 280 | 80 | 670 | 480 | 60 |
| Food Including Beverages | 90 | 130 | 20 | 80 | 150 | 20 | 100 | 180 | 20 |
| Textiles | 10 | 30 | 0 | 20 | 20 | 0 | 30 | 20 | 0 |
| Other Nondurables | 20 | 10 | 0 | 40 | 10 | 10 | 30 | 20 | 10 |
| TOTAL NONDURABLES | 810 | 710 | 110 | 1,040 | 890 | 150 | 1,410 | 1,350 | 140 |
| ALL MANUFACTURING | 1,870 | 1,120 | 190 | 2,090 | 1,290 | 240 | 2,580 | 1,860 | 220 |
| Mining | 60 | 70 | 10 | 70 | 60 | 10 | 60 | 60 | 20 |
| Railroads | 10 | 20 | 10 | 20 | 20 | 0 | 20 | 80 | 0 |
| Air Transportation | 10 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 |
| Other Transportation | 10 | 10 | 0 | 20 | 30 | 10 | 20 | 30 | 10 |
| Electric Utilities | 810 | 410 | 70 | 950 | 430 | 80 | 1,030 | 400 | 80 |
| Gas & Other Utilities | 10 | 20 | 0 | 20 | 20 | 0 | 10 | 30 | 0 |
| Communications | 70 | 10 | 0 | 50 | 10 | 0 | 50 | 20 | 10 |
| Trade & Services | 120 | 30 | 40 | 110 | 60 | 50 | 140 | 80 | 40 |
| ALL NONMANUFACTURING | 1,100 | 620 | 140 | 1,240 | 630 | 160 | 1,330 | 650 | 160 |
| ALL BUSINESS | 2,968 | 1,736 | 330 | 3,328 | 1,916 | 400 | 3,914 | 2,508 | 390 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis

**Table I.3**
(Continued)

| | 1976 | | | 1977 | | | 1978 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Air | Water | Solid Waste | Air | Water | Solid Waste | Air | Water | Solid Waste |
| Blast Furnaces, Steel Works | 310 | 200 | 0 | 310 | 200 | 10 | 310 | 140 | 10 |
| Nonferrous Metals | 240 | 50 | 10 | 160 | 60 | 10 | 130 | 30 | 10 |
| Electrical Machinery | 40 | 40 | 0 | 40 | 50 | 10 | 40 | 120 | 20 |
| Nonelectrical Machinery | 40 | 30 | 10 | 60 | 50 | 0 | 50 | 40 | 10 |
| Motor Vehicles | 30 | 50 | 30 | 50 | 70 | 40 | 100 | 80 | 40 |
| Aircraft | 20 | 10 | 0 | 10 | 10 | 0 | 10 | 10 | 10 |
| Fabricated Metals | 40 | 30 | 0 | 40 | 50 | 0 | 20 | 20 | 0 |
| Stone, Clay & Glass | 110 | 30 | 10 | 110 | 40 | 10 | 150 | 80 | 20 |
| Other Durables | 170 | 110 | 10 | 130 | 110 | 20 | 200 | 80 | 10 |
| TOTAL DURABLES | 1,000 | 550 | 70 | 910 | 640 | 100 | 1,010 | 600 | 130 |
| Chemicals | 330 | 490 | 50 | 300 | 480 | 50 | 270 | 320 | 40 |
| Paper | 170 | 250 | 10 | 130 | 210 | 30 | 140 | 160 | 30 |
| Rubber & Plastic | 20 | 20 | 0 | 40 | 20 | 10 | 40 | 10 | 0 |
| Petroleum | 490 | 500 | 110 | 470 | 500 | 80 | 530 | 510 | 90 |
| Food Including Beverages | 110 | 190 | 20 | 100 | 180 | 20 | 130 | 160 | 20 |
| Textiles | 10 | 30 | 0 | 20 | 20 | 0 | 80 | 20 | 10 |
| Other Nondurables | 20 | 10 | 0 | 20 | 10 | 0 | 10 | 40 | 10 |
| TOTAL NONDURABLES | 1,170 | 1,500 | 200 | 1,070 | 1,420 | 180 | 1,150 | 1,210 | 200 |
| ALL MANUFACTURING | 2,160 | 2,050 | 270 | 1,990 | 2,060 | 280 | 2,160 | 1,810 | 330 |
| Mining | 150 | 100 | 30 | 160 | 100 | 100 | 170 | 230 | 30 |
| Railroads | 20 | 30 | 0 | 10 | 40 | 0 | 10 | 40 | 0 |
| Air Transportation | 10 | 0 | 0 | 10 | 0 | 0 | 10 | 0 | 0 |
| Other Transportation | 20 | 40 | 10 | 20 | 20 | 0 | 10 | 20 | 10 |
| Electric Utilities | 1,220 | 540 | 90 | 1,490 | 650 | 130 | 1,450 | 890 | 150 |
| Gas & Other Utilities | 20 | 30 | 0 | 10 | 20 | 0 | 10 | 20 | 0 |
| Communications | 30 | 10 | 0 | 30 | 10 | 0 | 40 | 10 | 10 |
| Trade & Services | 170 | 100 | 30 | 100 | 80 | 30 | 110 | 90 | 40 |
| ALL NONMANUFACTURING | 1,630 | 850 | 170 | 1,830 | 920 | 270 | 1,820 | 1,310 | 250 |
| ALL BUSINESS | 3,798 | 2,903 | 440 | 3,811 | 2,973 | 550 | 3,977 | 3,123 | 580 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis

**Table I.3**
(Continued)

| | 1979 | | | 1980 | | | 1981 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Air | Water | Solid Waste | Air | Water | Solid Waste | Air | Water | Solid Waste |
| Blast Furnaces, Steel Works | 440 | 190 | 10 | 430 | 190 | 10 | 370 | 140 | 20 |
| Nonferrous Metals | 120 | 30 | 10 | 130 | 50 | 20 | 120 | 40 | 20 |
| Electrical Machinery | 50 | 150 | 10 | 70 | 130 | 20 | 130 | 140 | 20 |
| Nonelectrical Machinery | 50 | 50 | 10 | 50 | 50 | 10 | 30 | 70 | 10 |
| Motor Vehicles | 160 | 110 | 40 | 240 | 130 | 40 | 200 | 150 | 30 |
| Aircraft | 20 | 20 | 10 | 20 | 20 | 10 | 20 | 20 | 10 |
| Fabricated Metals | 10 | 50 | 0 | 30 | 40 | 10 | 20 | 30 | 0 |
| Stone, Clay & Glass | 200 | 40 | 20 | 250 | 40 | 10 | 130 | 50 | 10 |
| Other Durables | 150 | 50 | 30 | 170 | 60 | 20 | 100 | 90 | 40 |
| TOTAL DURABLES | 1,200 | 690 | 140 | 1,390 | 710 | 150 | 1,120 | 730 | 160 |
| Chemicals | 230 | 340 | 50 | 260 | 330 | 100 | 330 | 310 | 160 |
| Paper | 210 | 150 | 60 | 190 | 180 | 90 | 180 | 160 | 110 |
| Rubber & Plastic | 30 | 10 | 0 | 20 | 10 | 10 | 20 | 20 | 10 |
| Petroleum | 630 | 500 | 130 | 710 | 660 | 170 | 830 | 710 | 130 |
| Food Including Beverages | 90 | 140 | 30 | 80 | 160 | 20 | 110 | 130 | 30 |
| Textiles | 40 | 20 | 0 | 50 | 20 | 0 | 20 | 20 | 0 |
| Other Nondurables | 20 | 30 | 20 | 20 | 30 | 10 | 20 | 20 | 20 |
| TOTAL NONDURABLES | 1,260 | 1,190 | 300 | 1,320 | 1,390 | 400 | 1,520 | 1,370 | 460 |
| ALL MANUFACTURING | 2,450 | 1,880 | 430 | 2,710 | 2,100 | 540 | 2,640 | 2,100 | 620 |
| Mining | 190 | 180 | 80 | 170 | 110 | 90 | 140 | 90 | 90 |
| Railroads | 20 | 40 | 10 | 10 | 40 | 10 | 30 | 20 | 10 |
| Air Transportation | 10 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 |
| Other Transportation | 10 | 20 | 10 | 20 | 10 | 0 | 30 | 20 | 0 |
| Electric Utilities | 1,750 | 1,010 | 180 | 1,910 | 890 | 190 | 2,130 | 810 | 250 |
| Gas & Other Utilities | 20 | 20 | 10 | 40 | 20 | 0 | 60 | 30 | 0 |
| Communications | 20 | 10 | 0 | 50 | 10 | 0 | 40 | 10 | 0 |
| Trade & Services | 140 | 70 | 40 | 130 | 50 | 70 | 50 | 70 | 30 |
| ALL NONMANUFACTURING | 2,160 | 1,350 | 340 | 2,340 | 1,140 | 360 | 2,500 | 1,030 | 380 |
| ALL BUSINESS | 4,613 | 3,229 | 780 | 5,051 | 3,237 | 910 | 5,135 | 3,135 | 1,000 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis

**Table I.3**
(Continued)

| | 1982 | | | 1983 | | | 1984 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Air | Water | Solid Waste | Air | Water | Solid Waste | Air | Water | Solid Waste |
| Blast Furnaces, Steel Works | 320 | 180 | 20 | 200 | 140 | 10 | 230 | 160 | 10 |
| Nonferrous Metals | 120 | 40 | 20 | 90 | 20 | 10 | 150 | 30 | 30 |
| Electrical Machinery | 140 | 130 | 20 | 100 | 120 | 20 | 70 | 90 | 20 |
| Nonelectrical Machinery | 50 | 60 | 20 | 20 | 70 | 30 | 40 | 110 | 40 |
| Motor Vehicles | 170 | 90 | 20 | 150 | 70 | 20 | 130 | 140 | 30 |
| Aircraft | 10 | 20 | 10 | 10 | 10 | 10 | 10 | 20 | 10 |
| Fabricated Metals | 10 | 20 | 0 | 10 | 20 | 10 | 30 | 30 | 10 |
| Stone, Clay & Glass | 80 | 20 | 10 | 80 | 30 | 10 | 100 | 20 | 10 |
| Other Durables | 130 | 60 | 20 | 80 | 90 | 20 | 90 | 80 | 20 |
| TOTAL DURABLES | 1,030 | 620 | 140 | 740 | 570 | 140 | 850 | 680 | 180 |
| Chemicals | 310 | 310 | 60 | 260 | 290 | 60 | 220 | 280 | 70 |
| Paper | 180 | 90 | 70 | 200 | 110 | 60 | 260 | 170 | 110 |
| Rubber & Plastic | 20 | 10 | 10 | 20 | 10 | 10 | 50 | 10 | 10 |
| Petroleum | 750 | 700 | 120 | 560 | 780 | 120 | 580 | 570 | 120 |
| Food Including Beverages | 90 | 130 | 40 | 110 | 120 | 10 | 90 | 140 | 30 |
| Textiles | 20 | 20 | 0 | 20 | 10 | 0 | 30 | 10 | 10 |
| Other Nondurables | 20 | 30 | 10 | 20 | 30 | 10 | 40 | 30 | 10 |
| TOTAL NONDURABLES | 1,390 | 1,290 | 320 | 1,180 | 1,350 | 280 | 1,260 | 1,210 | 350 |
| ALL MANUFACTURING | 2,420 | 1,910 | 460 | 1,920 | 1,920 | 420 | 2,110 | 1,890 | 530 |
| Mining | 170 | 110 | 90 | 110 | 100 | 60 | 90 | 180 | 100 |
| Railroads | 20 | 50 | 10 | 10 | 30 | 0 | 10 | 30 | 0 |
| Air Transportation | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Transportation | 20 | 10 | 0 | 10 | 20 | 0 | 0 | 10 | 0 |
| Electric Utilities | 2,310 | 900 | 230 | 1,990 | 750 | 230 | 1,960 | 900 | 310 |
| Gas & Other Utilities | 60 | 50 | 0 | 40 | 20 | 0 | 30 | 40 | 10 |
| Communications | 10 | 10 | 0 | 20 | 0 | 0 | 10 | 0 | 0 |
| Trade & Services | 70 | 50 | 50 | 60 | 60 | 60 | 60 | 70 | 80 |
| ALL NONMANUFACTURING | 2,670 | 1,170 | 380 | 2,230 | 980 | 350 | 2,170 | 1,230 | 510 |
| ALL BUSINESS | 5,086 | 3,080 | 840 | 4,155 | 2,900 | 760 | 4,282 | 3,123 | 1,040 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis

**Table I.3**
(Continued)

| | 1985 | | | 1986 | | | 1987 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Air | Water | Solid Waste | Air | Water | Solid Waste | Air | Water | Solid Waste |
| Blast Furnaces, Steel Works | 350 | 250 | 10 | 250 | 210 | 10 | 230 | 280 | 20 |
| Nonferrous Metals | 130 | 30 | 30 | 130 | 50 | 20 | 160 | 50 | 20 |
| Electrical Machinery | 60 | 100 | 20 | 70 | 130 | 50 | 70 | 200 | 50 |
| Nonelectrical Machinery | 30 | 90 | 30 | 20 | 70 | 10 | 50 | 90 | 20 |
| Motor Vehicles | 240 | 190 | 60 | 370 | 110 | 60 | 180 | 130 | 50 |
| Aircraft | 10 | 20 | 10 | 10 | 20 | 10 | 20 | 40 | 30 |
| Fabricated Metals | 50 | 30 | 10 | 40 | 40 | 10 | 30 | 110 | 0 |
| Stone, Clay & Glass | 90 | 30 | 10 | 60 | 30 | 10 | 60 | 50 | 70 |
| Other Durables | 110 | 100 | 20 | 120 | 110 | 30 | 150 | 90 | 30 |
| TOTAL DURABLES | 1,070 | 840 | 200 | 1,070 | 770 | 210 | 950 | 1,040 | 290 |
| Chemicals | 320 | 320 | 110 | 390 | 480 | 110 | 300 | 410 | 140 |
| Paper | 320 | 170 | 100 | 250 | 150 | 150 | 260 | 80 | 110 |
| Rubber & Plastic | 50 | 20 | 10 | 30 | 30 | 20 | 40 | 30 | 20 |
| Petroleum | 500 | 600 | 140 | 720 | 650 | 110 | 900 | 950 | 260 |
| Food Including Beverages | 80 | 140 | 30 | 90 | 130 | 50 | 80 | 150 | 40 |
| Textiles | 20 | 10 | 0 | 20 | 0 | 10 | 30 | 0 | 10 |
| Other Nondurables | 40 | 30 | 10 | 40 | 40 | 10 | 70 | 30 | 10 |
| TOTAL NONDURABLES | 1,330 | 1,290 | 400 | 1,330 | 1,490 | 460 | 1,680 | 1,650 | 600 |
| ALL MANUFACTURING | 2,390 | 2,130 | 600 | 2,400 | 2,270 | 660 | 2,630 | 2,690 | 890 |
| Mining | 90 | 120 | 110 | 80 | 130 | 40 | 70 | 70 | 30 |
| Railroads | 10 | 30 | 10 | 10 | 20 | 0 | 10 | 20 | 0 |
| Air Transportation | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 |
| Other Transportation | 0 | 10 | 0 | 10 | 30 | 0 | 10 | 60 | 0 |
| Electric Utilities | 1,550 | 870 | 370 | 1,470 | 650 | 320 | 1,310 | 630 | 300 |
| Gas & Other Utilities | 30 | 40 | 10 | 20 | 30 | 0 | 20 | 20 | 10 |
| Communications | 10 | 0 | 0 | 20 | 0 | 0 | 10 | 10 | 0 |
| Trade & Services | 50 | 70 | 90 | 80 | 70 | 110 | 120 | 70 | 110 |
| ALL NONMANUFACTURING | 1,750 | 1,150 | 590 | 1,690 | 930 | 490 | 1,550 | 890 | 470 |
| ALL BUSINESS | 4,141 | 3,279 | 1,190 | 4,090 | 3,200 | 1,160 | 4,180 | 3,580 | 1,360 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis

**Table I.4**
**Historical Pollution Control Expenditures on Air, Water, and Solid Waste**
(Percent of total capital spending)

| | 1973 | | | 1974 | | | 1975 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Air | Water | Solid Waste | Air | Water | Solid Waste | Air | Water | Solid Waste |
| Blast Furnaces, Steel Works | 10.4 | 4.8 | 0.0 | 8.7 | 3.6 | 0.5 | 9.4 | 4.9 | 0.0 |
| Nonferrous Metals | 24.5 | 1.6 | 0.8 | 16.4 | 3.4 | 1.1 | 18.7 | 3.5 | 1.7 |
| Electrical Machinery | 1.4 | 1.7 | 0.3 | 1.6 | 1.6 | 0.0 | 1.6 | 1.0 | 0.3 |
| Nonelectrical Machinery | 1.3 | 1.0 | 0.3 | 0.8 | 0.8 | 0.2 | 0.8 | 0.8 | 0.2 |
| Motor Vehicles | 3.1 | 2.3 | 1.0 | 1.6 | 1.2 | 0.7 | 1.2 | 1.5 | 0.6 |
| Aircraft | 2.5 | 2.5 | 0.0 | 1.6 | 0.8 | 0.0 | 1.7 | 0.8 | 0.0 |
| Fabricated Metals | 2.8 | 1.7 | 0.0 | 3.6 | 1.0 | 0.0 | 3.6 | 3.1 | 0.0 |
| Stone, Clay & Glass | 8.2 | 1.3 | 0.0 | 11.5 | 1.2 | 0.0 | 11.4 | 1.8 | 0.0 |
| Other Durables | 4.3 | 1.3 | 0.2 | 2.8 | 1.4 | 0.4 | 3.3 | 1.8 | 0.2 |
| TOTAL DURABLES | 4.6 | 1.8 | 0.4 | 3.9 | 1.5 | 0.3 | 4.6 | 2.0 | 0.3 |
| Chemicals | 4.3 | 5.3 | 0.5 | 3.7 | 4.5 | 0.5 | 4.1 | 6.2 | 0.4 |
| Paper | 8.5 | 6.0 | 0.5 | 8.3 | 4.2 | 0.3 | 8.9 | 6.8 | 0.7 |
| Rubber & Plastic | 1.3 | 1.3 | 0.0 | 1.9 | 1.2 | 0.0 | 2.5 | 1.7 | 0.0 |
| Petroleum | 6.7 | 3.9 | 1.1 | 5.5 | 4.0 | 1.1 | 7.4 | 5.3 | 0.7 |
| Food Including Beverages | 2.4 | 3.5 | 0.5 | 1.9 | 3.5 | 0.5 | 2.3 | 4.1 | 0.5 |
| Textiles | 1.0 | 2.9 | 0.0 | 1.9 | 1.9 | 0.0 | 3.5 | 2.3 | 0.0 |
| Other Nondurables | 0.8 | 0.4 | 0.0 | 1.5 | 0.4 | 0.4 | 1.1 | 0.7 | 0.4 |
| TOTAL NONDURABLES | 4.1 | 3.6 | 0.6 | 4.0 | 3.5 | 0.6 | 5.0 | 4.8 | 0.5 |
| ALL MANUFACTURING | 4.4 | 2.6 | 0.4 | 4.0 | 2.5 | 0.5 | 4.8 | 3.5 | 0.4 |
| Mining | 1.8 | 2.1 | 0.3 | 1.5 | 1.3 | 0.2 | 1.0 | 1.0 | 0.3 |
| Railroads | 0.3 | 0.7 | 0.3 | 0.6 | 0.6 | 0.0 | 0.5 | 2.1 | 0.0 |
| Air Transportation | 0.5 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other Transportation | 0.3 | 0.3 | 0.0 | 0.5 | 0.8 | 0.3 | 0.4 | 0.7 | 0.2 |
| Electric Utilities | 5.4 | 2.7 | 0.5 | 5.6 | 2.6 | 0.5 | 6.1 | 2.4 | 0.5 |
| Gas & Other Utilities | 0.3 | 0.7 | 0.0 | 0.6 | 0.6 | 0.0 | 0.3 | 0.9 | 0.0 |
| Communications | 0.3 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 |
| Trade & Services | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 |
| ALL NONMANUFACTURING | 1.1 | 0.6 | 0.1 | 1.2 | 0.6 | 0.1 | 1.2 | 0.6 | 0.1 |
| ALL BUSINESS | 2.1 | 1.2 | 0.2 | 2.1 | 1.2 | 0.3 | 2.4 | 1.5 | 0.2 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis

**Table I.4**
(Continued)

| | 1976 | | | 1977 | | | 1978 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Air | Water | Solid Waste | Air | Water | Solid Waste | Air | Water | Solid Waste |
| Blast Furnaces, Steel Works | 9.9 | 6.4 | 0.0 | 10.8 | 7.0 | 0.3 | 11.9 | 5.4 | 0.4 |
| Nonferrous Metals | 17.0 | 3.5 | 0.7 | 12.4 | 4.6 | 0.8 | 8.9 | 2.1 | 0.7 |
| Electrical Machinery | 1.1 | 1.1 | 0.0 | 0.9 | 1.1 | 0.2 | 0.7 | 2.0 | 0.3 |
| Nonelectrical Machinery | 0.7 | 0.6 | 0.2 | 0.9 | 0.8 | 0.0 | 0.7 | 0.5 | 0.1 |
| Motor Vehicles | 0.8 | 1.4 | 0.8 | 0.9 | 1,2 | 0.7 | 1.4 | 1.1 | 0.6 |
| Aircraft | 2.0 | 1.0 | 0.0 | 0.9 | 0.9 | 0.0 | 0.6 | 0.6 | 0.6 |
| Fabricated Metals | 1.8 | 1.4 | 0.0 | 1.6 | 2.0 | 0.0 | 0.7 | 0.7 | 0.0 |
| Stone, Clay & Glass | 5.8 | 1.6 | 0.5 | 4.8 | 1.7 | 0.4 | 4.8 | 2.5 | 0.6 |
| Other Durables | 3.3 | 2.1 | 0.2 | 2.2 | 1.9 | 0.3 | 2.8 | 1.1 | 0.1 |
| TOTAL DURABLES | 3.6 | 2.0 | 0.3 | 2.8 | 2.0 | 0.3 | 2.6 | 1.5 | 0.3 |
| Chemicals | 4.5 | 6.6 | 0.7 | 4.1 | 6.5 | 0.7 | 3.5 | 4.1 | 0.5 |
| Paper | 5.7 | 8.4 | 0.3 | 3.7 | 6.0 | 0.9 | 3.7 | 4.2 | 0.8 |
| Rubber & Plastic | 1.5 | 1.5 | 0.0 | 2.3 | 1.1 | 0.6 | 1.7 | 0.4 | 0.0 |
| Petroleum | 4.9 | 5.0 | 1.1 | 4.0 | 4.2 | 0.7 | 4.0 | 3.9 | 0.7 |
| Food Including Beverages | 2.0 | 3.5 | 0.4 | 1.7 | 3.1 | 0.3 | 2.0 | 2.4 | 0.3 |
| Textiles | 1.0 | 3.1 | 0.0 | 1.7 | 1.7 | 0.0 | 6.1 | 1.5 | 0.8 |
| Other Nondurables | 0.7 | 0.3 | 0.0 | 0.6 | 0.3 | 0.0 | 0.2 | 0.9 | 0.2 |
| TOTAL NONDURABLES | 3.8 | 4.8 | 0.6 | 3.1 | 4.1 | 0.5 | 2.9 | 3.1 | 0.5 |
| ALL MANUFACTURING | 3.7 | 3.5 | 0.5 | 2.9 | 3.1 | 0.4 | 2.7 | 2.3 | 0.4 |
| Mining | 2.0 | 1.3 | 0.4 | 1.6 | 1.0 | 1.0 | 1.5 | 2.0 | 0.3 |
| Railroads | 0.5 | 0.7 | 0.0 | 0.2 | 0.9 | 0.0 | 0.2 | 0.8 | 0.0 |
| Air Transportation | 0.9 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 |
| Other Transportation | 0.3 | 0.7 | 0.2 | 0.4 | 0.4 | 0.0 | 0.2 | 0.4 | 0.2 |
| Electric Utilities | 6.3 | 2.8 | 0.5 | 6.4 | 2.8 | 0.6 | 5.5 | 3.4 | 0.6 |
| Gas & Other Utilities | 0.6 | 0.8 | 0.0 | 0.2 | 0.4 | 0.0 | 0.2 | 0.4 | 0.0 |
| Communications | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| Trade & Services | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 |
| ALL NONMANUFACTURING | 1.3 | 0.7 | 0.1 | 1.3 | 0.7 | 0.2 | 1.1 | 0.8 | 0.1 |
| ALL BUSINESS | 2.1 | 1.6 | 0.2 | 1.8 | 1.4 | 0.3 | 1.6 | 1.3 | 0.2 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis

**Table I.4**
(Continued)

| | 1979 | | | 1980 | | | 1981 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Air | Water | Solid Waste | Air | Water | Solid Waste | Air | Water | Solid Waste |
| Blast Furnaces, Steel Works | 13.7 | 5.9 | 0.3 | 12.5 | 5.5 | 0.3 | 10.6 | 4.0 | 0.6 |
| Nonferrous Metals | 7.3 | 1.8 | 0.6 | 6.1 | 2.3 | 0.9 | 4.8 | 1.6 | 0.8 |
| Electrical Machinery | 0.7 | 2.0 | 0.1 | 0.7 | 1.3 | 0.2 | 1.2 | 1.3 | 0.2 |
| Nonelectrical Machinery | 0.5 | 0.5 | 0.1 | 0.4 | 0.4 | 0.1 | 0.2 | 0.5 | 0.1 |
| Motor Vehicles | 1.9 | 1.3 | 0.5 | 2.7 | 1.4 | 0.4 | 2.0 | 1.5 | 0.3 |
| Aircraft | 0.7 | 0.7 | 0.4 | 0.6 | 0.6 | 0.3 | 0.6 | 0.6 | 0.3 |
| Fabricated Metals | 0.3 | 1.6 | 0.0 | 0.9 | 1.2 | 0.3 | 0.6 | 0.8 | 0.0 |
| Stone, Clay & Glass | 5.0 | 1.0 | 0.5 | 6.3 | 1.0 | 0.3 | 3.8 | 1.5 | 0.3 |
| Other Durables | 2.0 | 0.7 | 0.4 | 2.0 | 0.7 | 0.2 | 1.1 | 1.0 | 0.4 |
| TOTAL DURABLES | 2.5 | 1.4 | 0.3 | 2.5 | 1.3 | 0.3 | 1.9 | 1.2 | 0.3 |
| Chemicals | 2.3 | 3.5 | 0.5 | 2.2 | 2.8 | 0.9 | 2.5 | 2.4 | 1.2 |
| Paper | 4.0 | 2.9 | 1.1 | 2.9 | 2.8 | 1.4 | 2.9 | 2.6 | 1.8 |
| Rubber & Plastic | 1.2 | 0.4 | 0.0 | 1.0 | 0.5 | 0.5 | 0.9 | 0.9 | 0.5 |
| Petroleum | 4.1 | 3.3 | 0.9 | 3.6 | 3.4 | 0.9 | 3.2 | 2.7 | 0.5 |
| Food Including Beverages | 1.2 | 1.9 | 0.4 | 1.0 | 2.0 | 0.2 | 1.2 | 1.4 | 0.3 |
| Textiles | 2.8 | 1.4 | 0.0 | 3.3 | 1.3 | 0.0 | 1.2 | 1.2 | 0.0 |
| Other Nondurables | 0.3 | 0.5 | 0.3 | 0.3 | 0.4 | 0.1 | 0.2 | 0.2 | 0.2 |
| TOTAL NONDURABLES | 2.7 | 2.5 | 0.6 | 2.3 | 2.4 | 0.7 | 2.3 | 2.1 | 0.7 |
| ALL MANUFACTURING | 2.6 | 2.0 | 0.4 | 2.4 | 1.9 | 0.5 | 2.1 | 1.7 | 0.5 |
| Mining | 1.5 | 1.4 | 0.6 | 1.1 | 0.7 | 0.6 | 0.7 | 0.4 | 0.4 |
| Railroads | 0.3 | 0.6 | 0.2 | 0.1 | 0.6 | 0.1 | 0.5 | 0.3 | 0.2 |
| Air Transportation | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |
| Other Transportation | 0.2 | 0.4 | 0.2 | 0.4 | 0.2 | 0.0 | 0.6 | 0.4 | 0.0 |
| Electric Utilities | 6.0 | 3.5 | 0.6 | 6.4 | 3.0 | 0.6 | 6.7 | 2.5 | 0.8 |
| Gas & Other Utilities | 0.3 | 0.3 | 0.2 | 0.5 | 0.3 | 0.0 | 0.6 | 0.3 | 0.0 |
| Communications | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| Trade & Services | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 |
| ALL NONMANUFACTURING | 1.1 | 0.7 | 0.2 | 1.2 | 0.6 | 0.2 | 1.1 | 0.5 | 0.2 |
| ALL BUSINESS | 1.6 | 1.1 | 0.3 | 1.6 | 1.0 | 0.3 | 1.5 | 0.9 | 0.3 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis

**Table I.4**
(Continued)

| | 1982 | | | 1983 | | | 1984 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Air | Water | Solid Waste | Air | Water | Solid Waste | Air | Water | Solid Waste |
| Blast Furnaces, Steel Works | 8.5 | 4.8 | 0.5 | 6.2 | 4.3 | 0.3 | 6.5 | 4.5 | 0.3 |
| Nonferrous Metals | 6.3 | 2.1 | 1.1 | 5.2 | 1.2 | 0.6 | 7.0 | 1.4 | 1.4 |
| Electrical Machinery | 1.3 | 1.2 | 0.2 | 0.9 | 1.1 | 0.2 | 0.5 | 0.6 | 0.1 |
| Nonelectrical Machinery | 0.4 | 0.4 | 0.1 | 0.1 | 0.5 | 0.2 | 0.3 | 0.7 | 0.3 |
| Motor Vehicles | 2.2 | 1.2 | 0.3 | 2.1 | 1.0 | 0.3 | 1.2 | 1.3 | 0.3 |
| Aircraft | 0.3 | 0.6 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.3 |
| Fabricated Metals | 0.3 | 0.6 | 0.0 | 0.4 | 0.7 | 0.4 | 0.9 | 0.9 | 0.3 |
| Stone, Clay & Glass | 2.8 | 0.7 | 0.3 | 2.9 | 1.1 | 0.4 | 3.2 | 0.6 | 0.3 |
| Other Durables | 1.6 | 0.7 | 0.2 | 1.1 | 1.2 | 0.3 | 1.0 | 0.9 | 0.2 |
| TOTAL DURABLES | 1.9 | 1.1 | 0.3 | 1.4 | 1.1 | 0.3 | 1.3 | 1.0 | 0.3 |
| Chemicals | 2.4 | 2.4 | 0.5 | 2.0 | 2.2 | 0.5 | 1.4 | 1.8 | 0.5 |
| Paper | 3.2 | 1.6 | 1.3 | 3.4 | 1.9 | 1.0 | 3.6 | 2.4 | 1.5 |
| Rubber & Plastic | 0.9 | 0.5 | 0.5 | 0.8 | 0.4 | 0.4 | 1.6 | 0.3 | 0.3 |
| Petroleum | 2.8 | 2.7 | 0.5 | 2.4 | 3.4 | 0.5 | 2.3 | 2.2 | 0.5 |
| Food Including Beverages | 1.0 | 1.5 | 0.5 | 1.4 | 1.5 | 0.1 | 1.0 | 1.6 | 0.3 |
| Textiles | 1.4 | 1.4 | 0.0 | 1.3 | 0.6 | 0.0 | 1.6 | 0.5 | 0.5 |
| Other Nondurables | 0.2 | 0.4 | 0.1 | 0.2 | 0.3 | 0.1 | 0.4 | 0.3 | 0.1 |
| TOTAL NONDURABLES | 2.1 | 2.0 | 0.5 | 1.9 | 2.1 | 0.4 | 1.7 | 1.7 | 0.5 |
| ALL MANUFACTURING | 2.0 | 1.6 | 0.4 | 1.7 | 1.7 | 0.4 | 1.5 | 1.4 | 0.4 |
| Mining | 0.8 | 0.5 | 0.4 | 0.7 | 0.7 | 0.4 | 0.5 | 1.1 | 0.6 |
| Railroads | 0.4 | 0.9 | 0.2 | 0.2 | 0.6 | 0.0 | 0.1 | 0.4 | 0.0 |
| Air Transportation | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other Transportation | 0.4 | 0.2 | 0.0 | 0.2 | 0.4 | 0.0 | 0.0 | 0.2 | 0.0 |
| Electric Utilities | 6.4 | 2.5 | 0.6 | 5.3 | 2.0 | 0.6 | 5.3 | 2.4 | 0.8 |
| Gas & Other Utilities | 0.6 | 0.5 | 0.0 | 0.5 | 0.3 | 0.0 | 0.3 | 0.4 | 0.1 |
| Communications | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Trade & Services | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 |
| ALL NONMANUFACTURING | 1.2 | 0.5 | 0.2 | 1.0 | 0.4 | 0.2 | 0.8 | 0.5 | 0.2 |
| ALL BUSINESS | 1.5 | 0.9 | 0.2 | 1.2 | 0.8 | 0.2 | 1.1 | 0.8 | 0.3 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis

**Table I.4**
(Continued)

| | 1985 | | | 1986 | | | 1987 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Air | Water | Solid Waste | Air | Water | Solid Waste | Air | Water | Solid Waste |
| Blast Furnaces, Steel Works | 8.5 | 6.1 | 0.2 | 7.5 | 6.3 | 0.3 | 4.9 | 6.0 | 0.4 |
| Nonferrous Metals | 6.9 | 1.6 | 1.6 | 6.7 | 2.6 | 1.0 | 7.4 | 2.3 | 0.9 |
| Electrical Machinery | 0.4 | 0.6 | 0.1 | 0.5 | 0.9 | 0.4 | 0.5 | 1.3 | 0.3 |
| Nonelectrical Machinery | 0.2 | 0.6 | 0.2 | 0.1 | 0.5 | 0.1 | 0.4 | 0.6 | 0.1 |
| Motor Vehicles | 1.6 | 1.3 | 0.4 | 2.7 | 0.8 | 0.4 | 1.5 | 1.1 | 0.4 |
| Aircraft | 0.3 | 0.6 | 0.3 | 0.3 | 0.5 | 0.3 | 0.6 | 1.1 | 0.8 |
| Fabricated Metals | 1.4 | 0.8 | 0.3 | 1.0 | 1.0 | 0.2 | 0.7 | 2.7 | 0.0 |
| Stone, Clay & Glass | 2.6 | 0.9 | 0.3 | 1.9 | 1.0 | 0.3 | 1.8 | 1.5 | 2.1 |
| Other Durables | 1.0 | 0.9 | 0.2 | 1.1 | 1.0 | 0.3 | 1.2 | 0.7 | 0.2 |
| TOTAL DURABLES | 1.5 | 1.1 | 0.3 | 1.5 | 1.1 | 0.3 | 1.3 | 1.5 | 0.4 |
| Chemicals | 1.9 | 1.9 | 0.7 | 2.3 | 2.9 | 0.7 | 1.8 | 2.5 | 0.9 |
| Paper | 3.7 | 2.0 | 1.2 | 2.9 | 1.7 | 1.7 | 2.9 | 0.9 | 1.2 |
| Rubber & Plastic | 1.3 | 0.5 | 0.3 | 0.8 | 0.8 | 0.5 | 1.1 | 0.9 | 0.6 |
| Petroleum | 1.9 | 2.2 | 0.5 | 2.9 | 3.6 | 0.6 | 5.3 | 5.5 | 1.5 |
| Food Including Beverages | 0.8 | 1.4 | 0.3 | 0.8 | 1.2 | 0.5 | 0.7 | 1.4 | 0.4 |
| Textiles | 1.1 | 0.6 | 0.0 | 1.2 | 0.0 | 0.6 | 1.5 | 0.0 | 0.5 |
| Other Nondurables | 0.3 | 0.2 | 0.1 | 0.3 | 0.3 | 0.1 | 0.4 | 0.2 | 0.1 |
| TOTAL NONDURABLES | 1.7 | 1.6 | 0.5 | 1.8 | 2.0 | 0.6 | 2.2 | 2.2 | 0.8 |
| ALL MANUFACTURING | 1.6 | 1.4 | 0.4 | 1.7 | 1.6 | 0.5 | 1.8 | 1.8 | 0.6 |
| Mining | 0.6 | 0.8 | 0.7 | 0.7 | 1.2 | 0.4 | 0.6 | 0.6 | 0.3 |
| Railroads | 0.1 | 0.4 | 0.1 | 0.2 | 0.3 | 0.0 | 0.2 | 0.3 | 0.0 |
| Air Transportation | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 |
| Other Transportation | 0.0 | 0.2 | 0.0 | 0.2 | 0.5 | 0.0 | 0.2 | 0.9 | 0.0 |
| Electric Utilities | 4.3 | 2.4 | 1.0 | 4.3 | 1.9 | 0.9 | 4.1 | 2.0 | 0.9 |
| Gas & Other Utilities | 0.2 | 0.3 | 0.1 | 0.2 | 0.2 | 0.0 | 0.2 | 0.2 | 0.1 |
| Communications | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Trade & Services | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 |
| ALL NONMANUFACTURING | 0.6 | 0.4 | 0.2 | 0.6 | 0.3 | 0.2 | 0.5 | 0.3 | 0.2 |
| ALL BUSINESS | 1.0 | 0.8 | 0.3 | 1.0 | 0.7 | 0.3 | 0.9 | 0.8 | 0.3 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis